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USER MANUAL



CB5310

OVERFLOW CELL FOR 1 SENSOR
AND PT100



TO MEASURE  TO KNOW



Cod. 28019726

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1 DESCRIPTION

This flow cell series is designed for the use with potentiostatic residual chlorine monitors. The constant head flow cell controls the liquid speed near the measuring electrode over a wide variation of the feeding flow.

The water inlet is through the fitting 3.

The water outlet is through the fitting 5 on the bottom of the cell.

The cells are provided with a screw 4 suitable for the flow adjustment.

The chlorine/d. ozone CL5100 / SZ 283 electrode is inserted in the cell position 9.

The RTD Pt100 is inserted in position 8.

The package includes 2 m of 4 x 6 mm plastic tubing and the fitting for the cell connection to the water being measured.

The cell SZ 7263 is designed for the insertion in the position 10 of the pH and ORP electrodes. Electrodes must be inserted in the position suggested in this manual in order to have a correct operation.

1.1 ACCESSORIES

CL5100 / SZ 283	Potentiostatic chlorine or dissolved ozone sensor
PH5550 / SZ 165	pH electrode (choose other pH electrodes with 12 mm diameter)
PH5600 / SZ 275	ORP electrode (choose other ORP electrodes with 12 mm diameter)
SP 514	Temperature sensor



2 SPECIFICATIONS

2.1 CB5310 / SZ 7261 SPECIFICATIONS

Body	transparent epoxy
Inlet	1/8" fitting
Overflow outlet	10 x 14 mm diameter tubing
Dimensions	diameter 55 mm, length 150 mm
Fittings	1/8" for 4 x 6 mm tubing
Connection pipe	2 m length, 4 x 6 mm (included)
Water flow	approx. 10/30 l/hour
Temperature	0/50 °C
Sensors diameter	12 mm
RTD diameter	5 mm

2.2 SZ 7263 SPECIFICATIONS

Body	transparent epoxy
Inlet	1/8" fitting
Overflow outlet	10 x 14 mm diameter tubing
Dimensions	diameter 65 mm, length 150 mm
Fittings	1/8" for 4 x 6 mm tubing
Connection pipe	2 m length, 4 x 6 mm (included)
Water flow	approx. 10/30 l/hour
Temperature	0/50 °C
Sensors diameter	12 mm
RTD diameter	5 mm



3 INSTALLATION

The flow cell must be installed in vertical position close to the measuring instrument. See the pictures 1 and 2.

The flow assembly is wall mounted using the clamp 7 included in the package.

The overflow tubing connected to the fitting 5 must discharge in air, without any counter pressure (example into a 1" pipe).

Avoid long tubing to feed the flow cell in order to maintain a reasonable response time of the measuring.

Insert the CL5100 / SZ283 chlorine electrode in position 9.

Insert the RTD (if available) in position 8.

Insert the pH and ORP electrodes (only for SZ 7263) in position 10.

Connect the measuring sensors to the instrument according to the specific connections instruction.

Note:

It is very important to insert the CL5100 / SZ283 in the correct hole of the flow cell.

Keep as reference the hole of the RTD to locate the position to place the CL5100 / SZ283 sensor.

The wrong positioning of the CL5100 / SZ283 will not allow the sensor to operate under the constant flow provided by the overflow chamber of the flow cell.

The result of the wrong positioning will be an unsteady readout depending of the flow rate of the sample.



4 OPERATION

Adjust the screw 4 in order to assure the over flow even in the minimum inlet water pressure condition.

When the inlet flow adjustment is critical, install a supplementary tap on the feeding pipe.

5 MAINTENANCE

The chlorine/dissolved ozone electrode requires periodic maintenance.

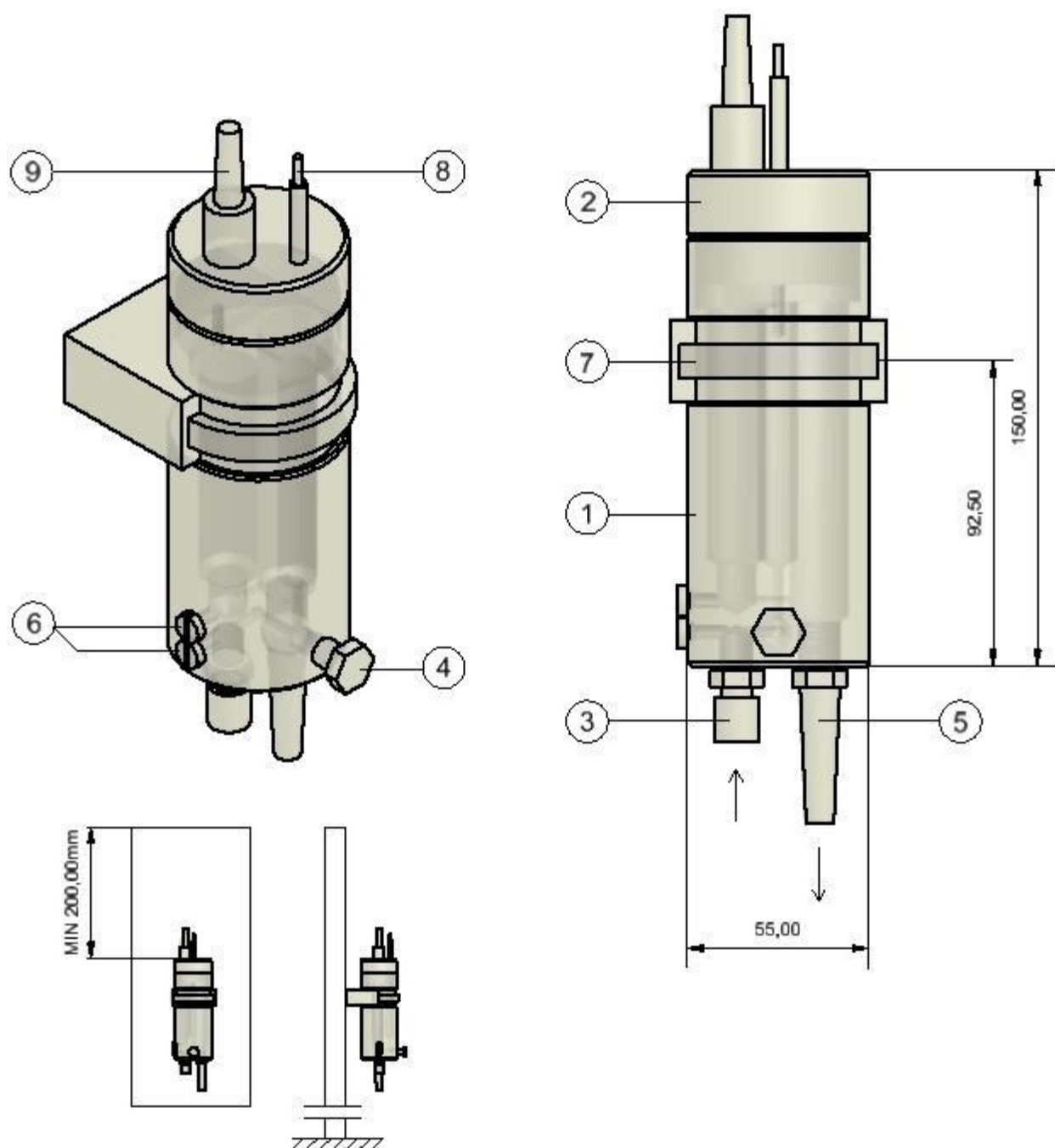
When the platinum bands become fouled, the sensitivity of the measuring will decrease and it is necessary to clean the platinum electrodes, pressing and rotating by hand a filter paper or similar.

Sensor maintenance should be performed every 4 weeks depending upon the severity of the sample stream conditions.

Applications in dirty water will require more frequent maintenance than the applications in clean water.

When some deposits or biological fouling are into the cell and internal holes, unscrew and remove the cell cleaning screw 6 and the OR, clean the holes and reassembly the screw and the OR.

CB5310 / SZ7261 - DESCRIPTION

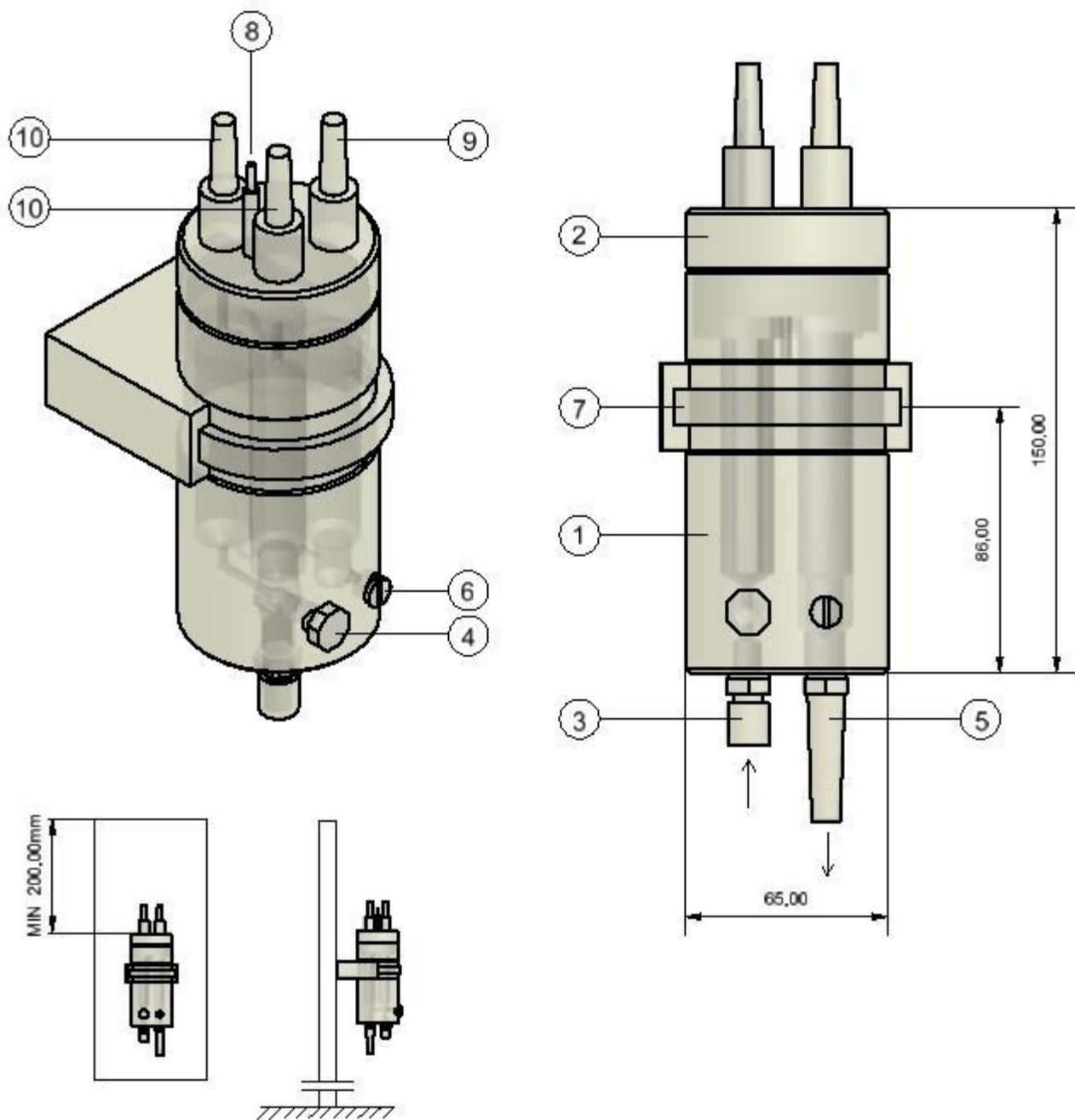


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- | | | | |
|----|----------------|-----|-------------------------------|
| 1. | Body | 6. | Cell cleaning screw |
| 2. | Drilled cover | 7. | Fixing clamp |
| 3. | Inlet fitting | 8. | RTD sensor |
| 4. | Flow control | 10. | Chlorine / d. ozone electrode |
| 5. | Outlet fitting | | |

Fig.1

SZ 7263 – DESCRIPTION



SZ7263 rev.A - A4 - 1:2

- | | |
|-------------------|----------------------------------|
| 1. Body | 6. Cell cleaning screw |
| 2. Drilled cover | 7. Fixing clamp |
| 3. Inlet fitting | 8. RTD sensor |
| 4. Flow control | 9. Chlorine / d. ozone electrode |
| 5. Outlet fitting | 10. pH / ORP electrodes |

Fig. 2



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